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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,508	12/08/2003	Robert J. Curran	POU920030196US1	2326
<div>7590 07/25/2007</div> <div>Lawrence D. Cutter, Attorney IBM Corporation Intellectual Property Law Dept. 2455 South Rd., M/S P386 Poughkeepsie, NY 12601</div> <div>EXAMINER MADAMBA, GLENFORD J</div> <div>ART UNIT 2151</div> <div>PAPER NUMBER</div> <div>MAIL DATE 07/25/2007</div> <div>DELIVERY MODE PAPER</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/730,508

Applicant(s)

CURRAN ET AL.

Examiner

Glenford Madamba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 and 9-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Moore et al (hereinafter Moore), U.S. Patent Publication US 2004/0249904 A1.

As per Claims 1, 19 and 20, Moore discloses a method of managing data movement, comprising:

establishing a processing environment in a cluster of nodes having common access to data residing in one or more data storage units [Abstract] [Figs. 2 & 6];

initiating a data management application (DM) in said environment (e.g. DMAPi) [0008];

assigning a node of said cluster as a coordinating node for managing data movement (e.g. electing a "leader" node, token server node 50 / metadata server node 22b) [Figs. 5-7];

receiving an event by the coordinating node requesting movement of data (e.g. "DMAPI events") [0008] [0074-0077];

posting a worker thread to one or more of the nodes to perform data movement in response to the event (e.g., RPC thread) [0103-0105] [0117-0118].

Claims 19 and 20 recite the same limitations as claim 1, are distinguished only by their statutory category, and thus rejected on the same basis.

As per Claim 2, Moore discloses the method of claim 1, wherein said worker threads are posted to one or more nodes other than said coordinating node to perform data movement tasks [0047] (e.g., RPC thread) [0103-0105] [0117-0118].

As per Claim 3, Moore discloses the method of claim 1, wherein said coordinating node is a session node (i.e, telnet session) [Fig. 2] [0123].

As per Claim 4, Moore discloses the method of claim 1, further comprising providing data management access rights to the one or more nodes to which said worker threads are posted, and permitting only the one or more nodes having said data management

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access rights to execute said worker threads (e.g. Coordination of cluster file system, such as CXFS, providing file system access and control) [0047-0048].

As per Claim 9, Moore discloses the method of claim 1, wherein said DM application utilizes one or more parallel file systems for management of data (e.g., CXFS cluster file system) [0047-0048].

As per Claim 10, Moore discloses the method of claim 9, wherein each parallel file system further comprises one or more physical file systems (e.g., CXFS cluster file system) [0047-0048].

As per Claim 11, Moore discloses the method of claim 10, wherein said worker threads include calls for performing at least one of punching holes in files, moving data into files and moving data out of files (e.g. create, lookup, read, write) [0049].

As per Claim 12, Moore discloses the method of claim 9, wherein said DM application is initiated using a data management application programming interface (DMAPI) (e.g. DMAPI_90) [Fig. 6].

As per Claim 13, Moore discloses the method of claim 1, wherein said DM application is initiated using a data management application programming interface (DMAPI) (DMAPI

(e.g. DMAPI_ 90) [Fig. 6].

As per Claim 14, Moore discloses the method of claim 1, wherein said processing environment includes a storage area network (SAN) including said one or more data storage units [Abstract] [Figs. 2 & 6].

As per Claim 15, Moore discloses the method of claim 12, wherein said processing environment includes a storage area network (SAN) including said one or more data storage units [Abstract] [Figs. 2 & 6].

As per Claim 16, Moore discloses the method of claim 14, wherein said worker threads perform data movement within a hierarchical storage management (HSM) system (e.g. HSM) [0008].

As per Claim 17, Moore discloses the method of claim 1, further comprising reassigning a worker thread to another node upon failure of the node to which the worker thread is dispatched (Cluster High Availability) [0079-0081].

As per Claim 17, Moore discloses the method of claim 1, further comprising assigning another coordinating node upon failure of the coordinating node (Cluster High Availability) [0079-0081] (i.e., "mirror master" node) [0083].

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al (hereinafter Moore), U.S. Patent Publication US 2004/0249904 A1 in view of Dugan et al (hereinafter Dugan), U.S. Patent Publication US 2006/0165223 A1.

As per Claim 5, Moore in view of Dugan discloses the method of claim 1, further comprising establishing a process session in said cluster and assigning a *session identifier* for that session.

While Moore discloses substantial features of the invention such as the method of claim 1, he does not explicitly disclose the added feature of the method of claim 1, further comprising establishing a process session in said cluster and assigning a *session identifier* for that session. The feature is disclosed by Dugan in a related endeavor.

Dugan discloses as his invention a resource management system for an intelligent communications network having one or more distributed service nodes, each service node for providing services relating to an event received at a network resource associated with a service node [Abstract]. In particular, Dugan discloses the additional recited feature of the method further comprising establishing a process session in said cluster and assigning a *session identifier* for that session (e.g. managing threads based on "session ids") [0088].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Moore's invention with the above added feature, as disclosed by Dugan, for the motivation of providing a method of managing communications service resources at nodes in an intelligent network designed to perform event processing services for any type of 'event' (e.g., telephone call, received at a resource complex or switching platform associated with nodes of an intelligent Distributed Network (also known as Next Generation Intelligent Network or "NGIN") [0002] [0023].

As per Claim 6, Moore in view of Dugan discloses the method of claim 5, further comprising providing said session identifier to said one or more nodes to which said worker threads are posted, and permitting only the one or more nodes having said session identifier to execute said worker thread [Abstract].

While Moore discloses substantial features of the invention such as the method of claim 5, he does not explicitly disclose the added feature of the method further comprising providing said session identifier to said one or more nodes to which said worker threads are posted, and permitting only the one or more nodes having said session identifier to execute said worker thread. The feature is disclosed by Dugan in a related endeavor.

Dugan discloses as his invention a resource management system for an intelligent communications network having one or more distributed service nodes, each service node for providing services relating to an event received at a network resource associated with a service node [Abstract]. In particular, Dugan discloses the additional recited feature of the method further comprising providing said session identifier to said one or more nodes to which said worker threads are posted, and permitting only the one or more nodes having said session identifier to execute said worker thread [Abstract].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Moore's invention with the above added feature, as disclosed by Dugan, for the motivation of providing a method of managing communications service resources at nodes in an intelligent network designed to perform event processing services for any type of 'event' (e.g., telephone call, received at a resource complex or switching platform associated with nodes of an intelligent Distributed Network (also known as Next Generation Intelligent Network or "NGIN") [0002] [0023].

As per Claim 7, Moore in view of Dugan discloses the method of claim 5, wherein said DM application establishes said session and assigns said session identifier (e.g. managing threads based on "session ids") [0088].

While Moore discloses substantial features of the invention such as the method of claim 5, he does not explicitly disclose the added feature of the method wherein said DM application establishes said session and assigns said session identifier (e.g. managing threads based on "session ids") [0088]. The feature is disclosed by Dugan in a related endeavor.

Dugan discloses as his invention a resource management system for an intelligent communications network having one or more distributed service nodes, each service node for providing services relating to an event received at a network resource associated with a service node [Abstract]. In particular, Dugan discloses the additional recited feature of the method wherein said DM application establishes said session and assigns said session identifier (e.g. managing threads based on "session ids") [0088].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Moore's invention with the above added feature, as disclosed by Dugan, for the motivation of providing a method of managing communications service resources at nodes in an intelligent network designed to perform event processing services for any type of 'event' (e.g., telephone call, received at a resource complex or switching platform associated with nodes of an intelligent

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Distributed Network (also known as Next Generation Intelligent Network or "NGIN")

[0002] [0023].

As per Claim 8, Moore in view of Dugan discloses the method of claim 5, wherein a plurality of sessions are established in said cluster concurrently and each session is assigned a unique session identifier (e.g. managing threads based on "session ids") [0088].

While Moore discloses substantial features of the invention such as the method of claim 5, he does not explicitly disclose the added feature of the method wherein a plurality of sessions are established in said cluster concurrently and each session is assigned a unique session identifier. The feature is disclosed by Dugan in a related endeavor.

Dugan discloses as his invention a resource management system for an intelligent communications network having one or more distributed service nodes, each service node for providing services relating to an event received at a network resource associated with a service node [Abstract]. In particular, Dugan discloses the additional recited feature of the method wherein a plurality of sessions are established in said cluster concurrently and each session is assigned a unique session identifier (e.g. managing threads based on "session ids") [0088].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Moore's invention with the above added feature, as disclosed by Dugan, for the motivation of providing a method of managing

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communications service resources at nodes in an intelligent network designed to perform event processing services for any type of 'event' (e.g., telephone call, received at a resource complex or switching platform associated with nodes of an intelligent Distributed Network (also known as Next Generation Intelligent Network or "NGIN") [0002] [0023].

Conclusion

1. The Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Dugan
Intelligent Network

Patent Pub No.: US 20050021713 A1

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- Beck et al Patent Pub No.: US 20040210656 A1
Failsafe operation of storage area network

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Wallace Martin can be reached on 571-272-3440. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Glenford Madamba
Examiner
Art Unit 2151

Valencia Martin
SPE ART UNIT 2151